

April 14, 2009

US EPA RECORDS CENTER REGION 5

Mr. Allen Debus Waste, Pesticides and Toxics Division U.S. EPA Region 5 77 West Jackson Blvd., DW8-J Chicago, IL 60604-3590

Dear Mr. Debus:

Re: Request for U.S. EPA Approval

Work Plan for Post-Removal Sampling and UST Removal - Revision 2

Former Delphi Harrison Thermal Systems Facility

U.S. EPA ID No. OHD 017 958 604

This letter requests U.S. EPA approval of GM's Work Plan – Revision 2 for post-removal sampling and UST removal, which is presented below. This document incorporates U.S. EPA comments on the February 12, 2009 version of the Work Plan, which was a consolidation of the Work Plan for Post-Removal Sampling previously submitted in December 2006, and the Work Plan for Removal of UST previously submitted in November 2006, and reflected a revised approach due to GM's responses to U.S. EPA's August 18, 2008 responses to GM's July 10, 2007 responses to U.S. EPA's January 11, 2007 comments on the RFI Addendum 1. The responses to U.S. EPA's March 5, 2009 and August 18, 2008 comments are presented in Attachment A. Analytical results are presented in Attachment B.

For completeness, the following is a summary of proposed sampling activities, if any, associated with all AOIs discussed in RFI Addendum 1:

AOI#	Proposed Samples	Proposed Analyses	Reference
36 – Bldg 15 T-trench	Additional sampling and remediation documented separately	Additional sampling and remediation documented separately	T-Trench Work Plan – Revision 2 (BOW, March 2009)
37 – Bldg 22 Elevator Piston	None	None	RFI Addendum 1 (CRA, December 2006)
38 – Bldg 1 Elevator Piston	1 soil boring (2-4 samples) 3 soil borings (sample if evidence of contamination)	TCL/TAL	discussed below
39 - Bldg 12B Sump	None	None	Attachment A
40 – Bldg 12A Concrete Vault	None	None	RFI Addendum 1 (CRA, December 2006)

41 – Bldg 1 Vertical Pipe	2 soil borings (3-4 samples each) 2 soil borings (sample if evidence of contamination)	TCL PCBs	discussed below
42 - Bldg 12B UST1	None	None	RFI Addendum 1 (CRA, December 2006)
43 - Bldg 22 UST	None	None	Attachment A
44 – Bldg 12B Free Product	5 soil borings (3-5 samples each)	TCL/TAL	discussed below and Attachment A
45 – Blue-Green Soil Area	3 soil borings (3-4 samples each), of which 2 soil borings are also adjacent to AOI 41 (see above)	TCL PCBs	discussed below and Attachment A
46 – Bldg 15 Holding Tank	None	None	RFI Addendum 1 (CRA, December 2006)
47 – Bldg 12B T- trench	Additional sampling and remediation documented separately	Additional sampling and remediation documented separately	T-Trench Work Plan - Revision 2 (BOW, March 2009)
48 – Bldg 12B UST 3	6 soil and/or concrete samples	TCL/TAL	discussed below and Attachment A

1.0 POST-REMOVAL SAMPLING WORK PLAN

This memorandum describes additional sampling activities to be conducted in the vicinity of features identified and removed by the City of Dayton during redevelopment activities between Webster and Taylor Streets. These features are shown on Figure 1. Additional supporting information, including analytical reports and photographs, is presented in RFI Report Addendum 1 (CRA, December 14, 2006).

1.1.0 AOI 38 - BUILDING 1 ELEVATOR PISTON

1.1.1 <u>DESCRIPTION</u>

An elevator piston located in Building 1 was associated with the building, as sold to Peerless. The piston was surrounded by a 3-foot by 1.5-foot concrete block above the building slab and terminated in a 6-foot square concrete footer embedded in the concrete building slab.

1.1.2 PRE-REMOVAL SAMPLES

The City collected one oil sample on May 5, 2006 and analyzed the sample for PCBs and Total Petroleum Hydrocarbons (TPH) fingerprint. PCBs were detected at 21.3 mg/kg. The TPH

fingerprint did not identify a match for any library compounds, but appeared to contain some petroleum product resembling motor oil, with sample peaks in the C20-C34 range.

1.1.3 REMOVAL ACTIVITIES

The Building 1 elevator piston was removed by the City on July 18, 2006. The piston was inspected by GM on August 16, 2006, and was found to consist of a metal cylinder approximately 6 to 8 feet long surrounded with concrete. Minor staining was observed on the concrete surface near the top of the piston. The concrete base was mostly clean, with minor staining observed in one small area. The piston was subsequently disposed of off Site by the City.

1.1.4 PROPOSED POST-REMOVAL SAMPLES

Based on staining that suggested a minor release to the environment may have occurred, GM proposes to complete one soil boring northwest (i.e. hydraulically downgradient) and one soil boring southwest of the Building 1 elevator piston, as identified on Figure 1. GM proposes to collect soil samples at the 0 to 2-foot interval, the 6 to 8-foot interval, the 2-foot interval immediately above the water table, and any other intervals that exhibit evidence of contamination (e.g., staining or elevated PID readings). If a sample depth within 2 ft of the water table is already selected for analysis, no separate sample will be collected immediately above the water table. An additional 2 soil borings will be installed surrounding the piston to the northeast, and southeast, as shown on Figure 1. Soil samples will be collected from intervals that exhibit evidence of contamination (i.e. staining or elevated PID readings), if any. The soil samples will be analyzed for TCL/TAL parameters consistent with RFI sampling activities. The sample results will be evaluated to determine whether any release to the environment has occurred, and impact, if any, on the risk assessments included with the March 2006 RFI Report and subsequent RFI Report Addenda. The sample results and evaluation will be submitted to U.S. EPA.

1.2.0 AOI 41 - BUILDING 1 VERTICAL PIPE

1.2.1 <u>DESCRIPTION</u>

A vertical pipe located on the western edge of Building 1 was identified by the City on April 16, 2006, during Stage 2 demolition activities. This pipe consisted of a metal pipe approximately 15 inches in diameter extending upwards from a 4-foot square concrete footer embedded in the concrete building slab. The City observed that the pipe contained oil and soil and/or debris from building demolition.

1.2.2 PRE-REMOVAL SAMPLES

The City collected one soil sample of the material from within the pipe on April 18, 2006 and analyzed the sample for TCLP VOCs, TCLP SVOCs, PCBs, and Diesel Range Organics (DRO) fingerprint. The only parameter detected was PCBs at 0.67 mg/kg. The DRO fingerprint did not

identify a match for any library compounds, but appeared to contain some petroleum product resembling fuel oil and some resembling motor oil.

1.2.3 REMOVAL ACTIVITIES

The oil was pumped from the vertical pipe and the pipe was removed from the ground by the City on July 18, 2006. The pipe was inspected by GM on August 16, 2006, and was found to consist of a metal pipe approximately 8 to 10 feet long in a concrete/rock base. The interior of the pipe was completely filled with rock. The exterior of the pipe and base were visibly clean, and the rock inside the pipe was also visibly clean. The pipe and contents were subsequently disposed of off Site by the City.

1.2.4 POST-REMOVAL SAMPLES

The City collected one soil sample on June 27, 2006 following removal of the pipe and analyzed the sample for VOCs and SVOCs. PCE and TCE were detected at 0.0221 mg/kg and 0.0064 mg/kg, respectively. Various PAHs were also detected at concentrations ranging from 0.445 mg/kg [indeno(1,2,3-cd)pyrene] to 3.77 mg/kg (pyrene).

1.2.5 PROPOSED POST-REMOVAL SAMPLES

Based on the lack of evidence of any release to the environment, and the low concentration of PCBs detected in the pipe contents (0.67 mg/kg), GM did not originally collect post-removal samples. However, due to U.S. EPA's request that post-removal samples be collected from all areas where PCBs were detected, GM proposes to complete two soil borings northwest (i.e. hydraulically downgradient) and southwest of the Building 1 vertical pipe, as identified on Figure 1. These soil borings will also be near the blue-green soil area (see Section 1.4). GM proposes to collect soil samples at the 0 to 2-foot interval, the 6 to 8-foot interval, the 2-foot interval immediately above the water table, and any other intervals that exhibit evidence of contamination (e.g., staining or elevated PID readings). If a sample depth within 2 ft of the water table is already selected for analysis, no separate sample will be collected immediately above the water table. An additional two soil borings will be installed surrounding the pipe to the northeast and southeast, as shown on Figure 1. Soil samples will be collected from intervals that exhibit evidence of contamination (i.e. staining or elevated PID readings), if any. The soil samples will be analyzed for TCL PCBs. The sample results will be evaluated to determine whether any release to the environment has occurred, and impact, if any, on the risk assessments included with the March 2006 RFI Report and subsequent RFI Report Addenda. The sample results and evaluation will be submitted to U.S. EPA.

1.3.0 AOI 44 - BUILDING 12B FREE PRODUCT

1.3.1 DESCRIPTION

A free product area located in the northwest portion of Building 12B was identified by the City on May 17, 2006 during Stage 2 demolition activities, when the concrete building slab in this area

was removed. The area was approximately 18 x 25 feet and consisted of oily water pooled on the surface of the soil. A subgrade concrete structure, approximately 12 x 15 x 3 feet deep, was identified by GM during excavation of the oil impacted soil. This concrete structure may have been associated with structural support.

1.3.2 PRE-REMOVAL SAMPLES

The City collected one oil/water sample and one soil/sludge sample from the surface of the impacted area on May 17, 2006. The oil/water sample was analyzed for PCBs and DRO fingerprint. PCBs were detected at 27 mg/kg, and the DRO fingerprint identified a hydrocarbon similar to Fuel Oil 1 and Hydraulic Fluid. The soil/sludge sample was analyzed for VOCs, PCBs, and DRO fingerprint. The following VOCs were detected: sec-butylbenzene (0.852 mg/kg), cis-1,2-dichloroethene (2.800 mg/kg), p-isopropyltoluene (0.902 mg/kg), n-propylbenzene (0.487 mg/kg), 1,2,4-trimethylbenzene (3.360 mg/kg), and 1,3,5-trimethylbenzene (0.499 mg/kg). PCBs were also detected at 2.62 mg/kg. The DRO fingerprint identified a hydrocarbon similar to Fuel Oil 1.

1.3.3 REMOVAL ACTIVITIES

Approximately 160 tons of soil and concrete was excavated by GM between July 18 to July 21, 2006, and on August 31, 2006, and placed in roll-off boxes. The excavation area was approximately 18 x 25 feet, and approximately 3 feet deep. The concrete structure was removed along with surrounding soil within approximately 3 feet laterally. The underlying soil was not stained. The excavation was extended to 8 feet in one area due to water being observed seeping into the excavation in this area. Staining was observed at depth; however, based on the presence of unstained soil above it, this staining did not appear to be associated with the free product area, therefore, further excavation was not conducted. The excavated material was disposed of off Site, in accordance with applicable regulations between September 29 and October 4, 2006.

1.3.4 POST-REMOVAL SAMPLES

GM collected three samples from the main excavation (FP-2, FP-3, and FP-4), and one additional sample from the stained material at depth (FP-1), on July 20, 2006 and analyzed the samples for TCL VOCs, TCL SVOCs, TCL PCBs, and TAL metals (except for aluminum, calcium, iron, magnesium, potassium, and sodium), consistent with RFI sampling. The data from sample FP-2 had high concentrations of the following metals: antimony (2,580 mg/kg), copper (6,290 mg/kg), lead (4,530 mg/kg), and zinc (1,060 mg/kg), which do not appear to be associated with the free product that was excavated. Risk calculations using these concentrations, along with the concentration of PCBs found at FP-4, showed that these concentrations could contribute significantly to risk estimates for routine workers if they represent concentrations that still remain in surface soil in the vicinity of these sample locations.

GM will install one soil boring within the former excavation and four soil borings surrounding the excavation to further delineate PCB and metal concentrations in this area, as identified on Figure 1. Soil borings will be completed to the water table and, consistent with RFI sampling

protocol, samples will be collected from intervals at the surface, immediately above the water table, at the location of evidence of potential contamination if any, and a depth consistent with the elevation of FP-2. Sample FP-2 was collected at a depth of 3 feet below the bottom of the excavation, which was 3 feet deep. Stained soil was identified at FP-1 at a depth of 6-8 feet below the bottom of the excavation, which was 3 feet deep. Therefore, the specific intervals to be sampled for the boring within the excavation limits are: 0-2 feet, 2-4 feet, 6-8 feet, immediately above the water table, and at the location of evidence of potential contamination if any. The specific intervals to be sampled for the borings outside the excavation limits are: 0-2 feet, 6-8 feet, 10-12 feet, immediately above the water table, and at the location of evidence of potential contamination if any. If a sample depth within 2 ft of the water table is already selected for analysis, no separate sample will be collected immediately above the water table. Samples will be analyzed for TCL/TAL parameters.

1.4.0 AOI 45 - BLUE-GREEN SOIL AREA

1.4.1 DESCRIPTION

A blue-green soil area located in the southeast portion of Building 12A was identified by the City on March 24, 2006 during Stage 2 demolition activities, when the concrete building slab in this area was removed. The area of blue-green stained soil was approximately 17 x 22 feet.

1.4.2 PRE-REMOVAL SAMPLES

The City collected one soil sample on March 24, 2006 and analyzed the sample for TCLP VOCs, TCLP SVOCs, TCLP metals, and PCBs. The following metals were detected: barium (0.39 mg/L), chromium (2.96 mg/L), and zinc (52.2 mg/L). PCBs were also detected at 3.68 mg/kg. VOCs and SVOCs were not detected.

1.4.3 REMOVAL ACTIVITIES

Approximately 80 cubic yards of soil was excavated by the City and subsequently disposed of off Site. The excavation area was approximately 17 x 22 feet, and approximately 8 feet deep.

1.4.4 POST-REMOVAL SAMPLES

The City collected three post-excavation soil samples on May 24, 2006, but these samples were never analyzed because GM collected post-excavation samples.

GM collected three post-excavation floor soil samples on May 25, 2006, and analyzed the samples for TCL VOCs, TCL SVOCs, TCL PCBs, and TAL inorganics (except for aluminum, calcium, iron, magnesium, potassium, and sodium), consistent with RFI sampling.

1.4.5 PROPOSED POST-REMOVAL SAMPLES

Based on risk assessment conducted for RFI Report Addendum 1, GM did not originally propose to collect additional post-removal samples. However, in response to U.S. EPA's comments dated August 18, 2008, GM will install one soil boring adjacent to sample location SB 2 and two soil borings to the east to further delineate PCB concentrations in this area, as shown on Figure 1. The eastern soil borings will also be near the former vertical pipe (see Section 1.2). Soil borings will be completed to the water table and, consistent with RFI sampling protocol, samples will be collected from intervals at the surface, immediately above the water table, at the location of evidence of potential contamination if any, and at 6-8 feet depth consistent with the sample from SB 2. Samples will be analyzed for TCL PCBs. The sample results will be evaluated to determine whether any release to the environment has occurred, and impact, if any, on the risk assessments included with the March 2006 RFI Report and subsequent RFI Report Addenda. The sample results and evaluation will be submitted to U.S. EPA.

2.0 UST REMOVAL WORK PLAN

UST 3 (a previously unknown UST) was identified by CRA on August 29, 2006. UST 3 consists of an upright metal tank approximately 6 ft. in diameter containing water. The historical contents of UST 3 are unknown. UST 3 is currently in place, as shown on Figures 2 and 3.

UST 3 is located partially under the concrete slab and partially surrounded by a subgrade concrete block wall. The floor slabs have been in place since approximately 1919 to 1920, and the UST is therefore not believed to have been used by GM, which purchased the property in 1919. GM no longer owns the property where the UST is located, having sold this property to the Peerless Transportation Company (Peerless) in 1996. Therefore, GM would not be considered the owner/operator of the UST per OAC 1301:7-9-02.

The City collected one water sample from UST 3 on August 29, 2006 and analyzed the sample for PCBs, VOCs, SVOCs, and TPH parameters. PCBs were detected at a concentration of 60.2 μ g/L, vinyl chloride at 898 μ g/L, total xylene at 4,650 μ g/L, and 2,4-dimethylphenol at 336 μ g/L. The TPH analysis detected peaks in the kerosene and motor oil ranges, and also a high component of lighter compounds. The analytical report is presented in Attachment B.

GM proposes to remove UST 3 consistent with OAC 1301:7-9-12, as follows:

- 1. Concrete samples will be collected from three locations in the concrete slab overlying UST 3, consistent with 40 CFR 761.283. The concrete slab will then be removed, to the extent necessary to safely remove UST 3, and broken into suitable-sized pieces for disposal. If the PCB concentration is below 50 mg/kg (as anticipated), the concrete will be managed and disposed of appropriately by the City of Dayton in the same manner as during demolition. If the concentration is equal to or greater than 50 mg/kg, it will be disposed of off-site as TSCA debris.
- GM will engage a certified UST installer to perform the work, will obtain a permit from the local fire agency pursuant to OAC 1301:7-9-10, and will arrange for a certified UST inspector to observe the work.

- 3. Water from UST 3 will be managed as follows:
 - Water will be containerized in one or more poly tanks.
 - After settling to minimize turbidity, water will be pumped through a drum containing a sand filter and two drums containing granular activated carbon (GAC) and into a frac tank.
 - The poly tank(s) will be power-washed with potable water to remove any residual sediment, and this water will also be pumped through a drum containing a sand filter and two drums containing GAC and into a frac tank.
 - Water in the frac tank will be sampled for TCL/TAL parameters after all water has been put into the tank, or if the tank is full. Assuming PCBs are not detected and the concentrations of other constituents are below drinking water criteria, water will be discharged to the storm sewer
- 4. The UST will be cleaned and removed pursuant to OAC 1301:7-9-12(G). The UST will be rendered unusable and free of vapors, and the metal will be recycled off-site in accordance with applicable regulations.
- 5. Removal of all backfill from the tank excavation is required pursuant to OAC 1301:7-9-12(G)(1)(f). However, it is anticipated that backfill may not be visually distinct from native soil, since both are sand/gravel. Therefore, only stained soil, if any, will be removed to a maximum extent of 12 inches from the tank wall. Any soil removed will be containerized, sampled and analyzed for TCLP VOCs, TCLP SVOCs, TCLP inorganics, and TCL PCBs for waste characterization, and then disposed of off site in accordance with applicable regulations.
- 6. Post-excavation soil samples will be collected from the floor of the excavation and from each of the four sidewalls. Where a subsurface foundation is adjacent to the UST (e.g. on the southern wall), a sample of the concrete or brick wall will also be collected. The sample from the western wall will be collected from a depth greater than 6 feet bgs (i.e. deeper than sample S-011), as requested by U.S. EPA. Samples will be collected from the location of the greatest evidence of potential contamination, including staining and/or elevated photoionization detector (PID) readings. If no evidence of potential contamination is observed, the sample will be collected from the middle of the sidewall or the middle of the excavation floor, except as noted above.
- 7. All post-excavation samples will be submitted to a laboratory and analyzed for TCL/TAL parameters (consistent with the RFI sampling activities) and TPH parameters. The post-excavation sample results, except for TPH, will be evaluated to determine impact, if any, on the risk assessment included in a future report. The sample results and evaluation will be submitted to U.S. EPA.

April 14, 2009 Page 9

If you have any questions or require further information, please call me at (937) 455-2636.

Sincerely,

Pamela L. Barnett, P.G.

Famela L. Barnett

Project Manager

BOW Environmental Solutions, Inc. on Behalf of GM

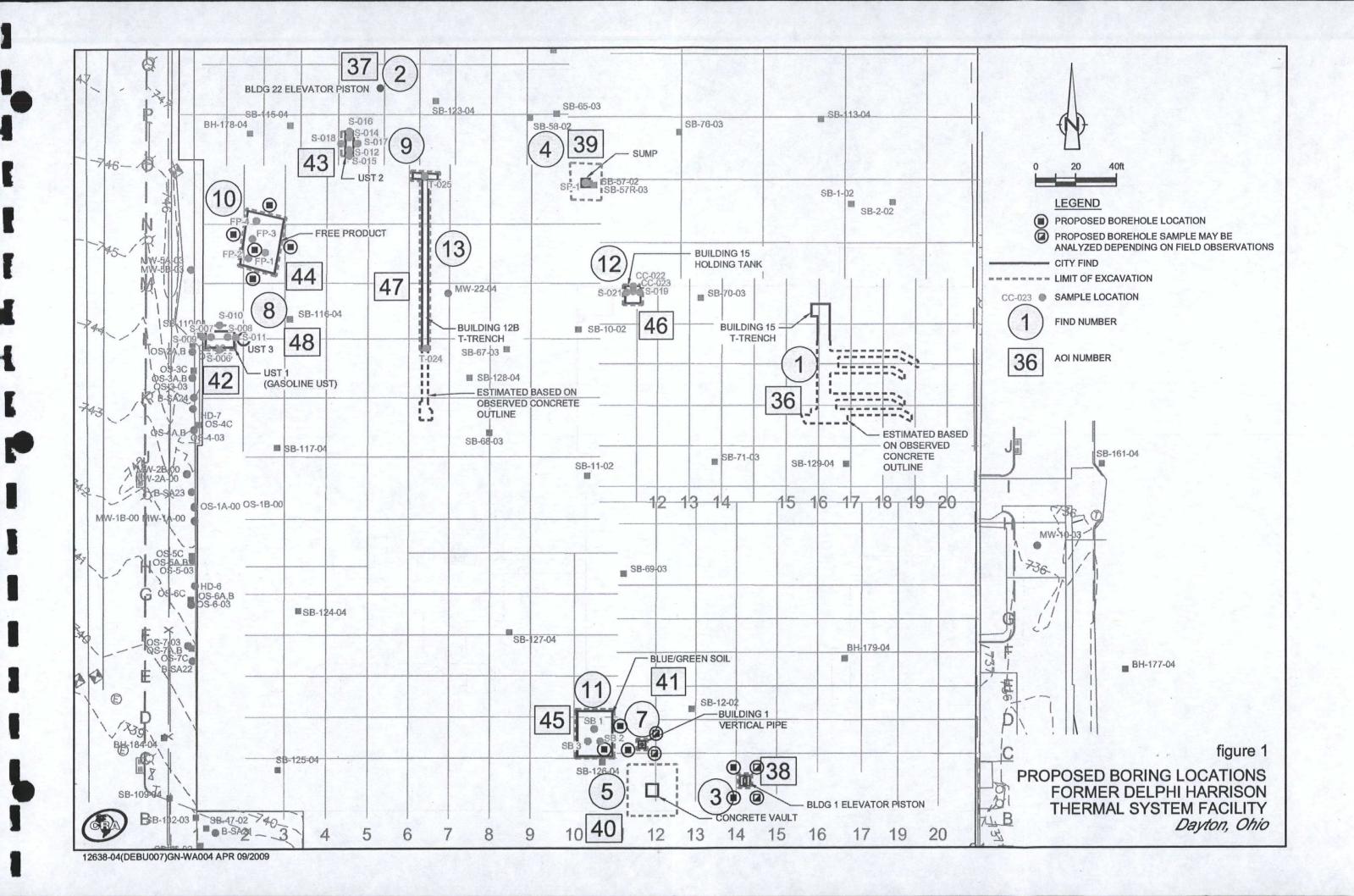
SE/ev/7 Attachments

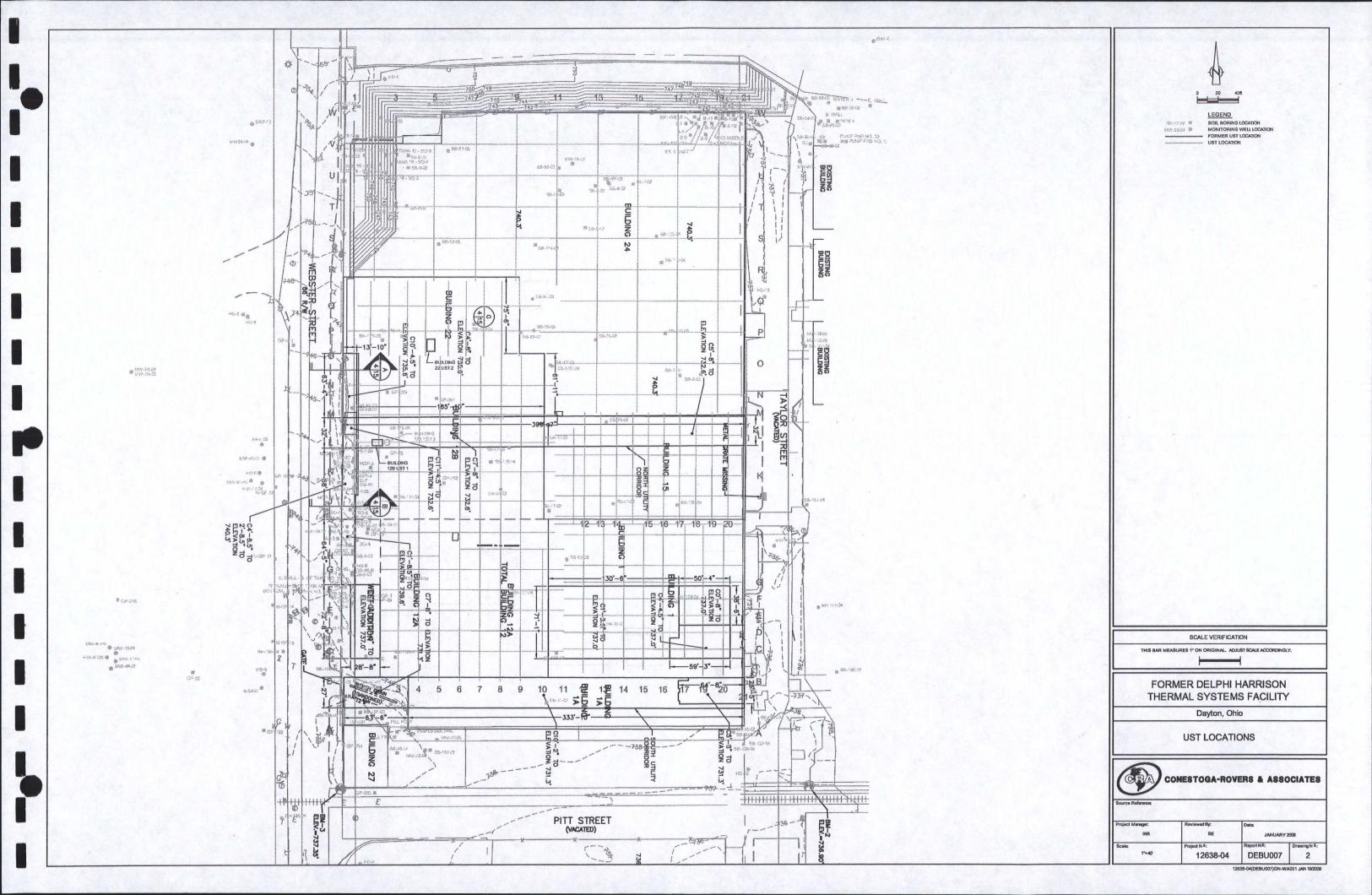
c.c.: Jean Caufield, GM Remediation

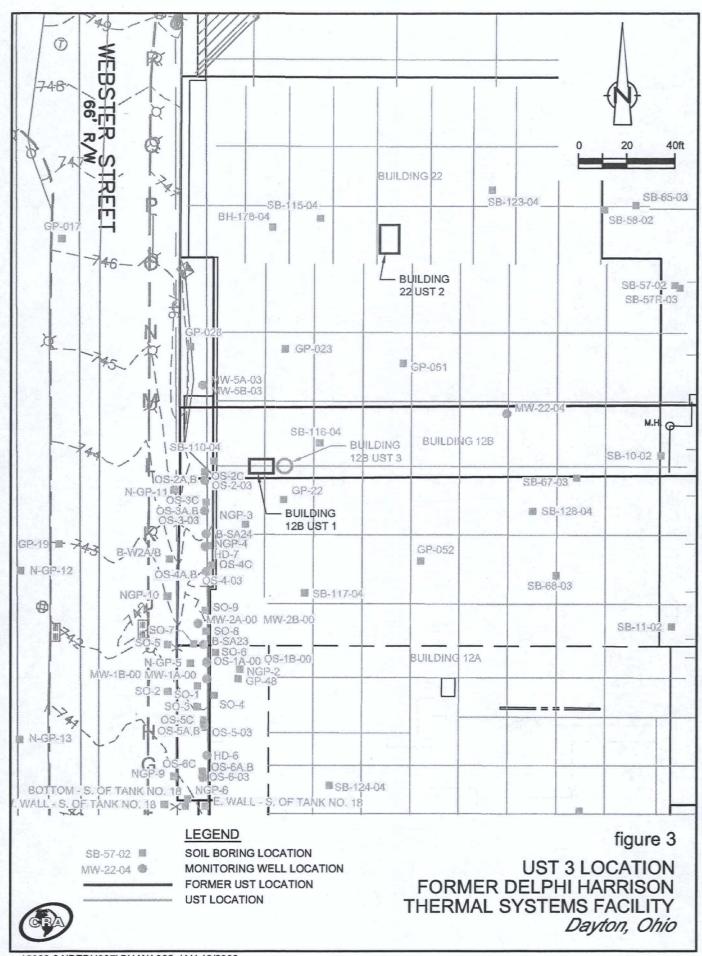
Pamela Hull, Ohio EPA

Carl Bridges, Peerless Transportation Company

Chris Lipson, City of Dayton







ATTACHMENT A

GM'S RESPONSE DATED MARCH 26, 2009

TO U.S. EPA'S MARCH 5, 2009
COMMENTS OF TECHNICAL REVIEW
ON THE FEBRUARY 12, 2009 DOCUMENT ENTITLED
"REQUEST FOR EPA APPROVAL OF THE
REVISED WORK PLAN FOR POST-REMOVAL SAMPLING
AND UST REMOVAL"

GENERAL MOTORS CORPORATION FORMER DELPHI HARRISON THERMAL SYSTEMS FACILITY DAYTON, OHIO

Booz Allen Hamilton (Booz Allen) conducted a technical review of the Revised Work Plan for Post-Removal Sampling and Underground Storage Tank (UST) Removal for the General Motors Corporation (GM) Former Delphi Harrison Thermal Systems Facility in Dayton, Ohio, dated February 12, 2009. Attachment A to this revised work plan includes GM's responses to EPA comments transmitted to the facility on August 18, 2008, with regard to Addendum 1 to the Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) and Work Plan for Additional Delineation Sampling.

As directed by the U.S. Environmental Protection Agency (EPA), this review was focused on, but not entirely limited to, issues pertaining to management and remediation of polychlorinated biphenyls (PCBs) under the Toxic Substances Control Act (TSCA). Specific comments are presented below.

COMMENTS ON THE REVISED WORK PLAN

Section 1.1.3 Area of Interest (AOI) 38 - Building 1 Elevator Piston Removal Activities

1. The Work Plan should be expanded to identify the location of the "minor staining observed in one small area." Without this information, GM's proposed soil boring location cannot be properly evaluated. However, as a general rule, if the staining was observed on a single side of the concrete footing, the proposed boring should be advanced into soil adjacent to that side. If the staining was observed close to a corner of the concrete base, a soil boring should be advanced adjacent to the two sides forming that corner of the footing. Furthermore, unless the concrete footing itself was removed, a core sample of concrete should be collected from the area of staining. Like the proposed soil samples, the concrete sample should be analyzed for target compound list (TCL) and target analyte list (TAL) parameters.

GM Response: The Building 1 Elevator Piston was an elevator piston, not a concrete footer. Minor staining was observed on the concrete attached to the piston after it had been removed from the ground, as shown on photographs presented in Appendix B of the RFI Addendum 1 (CRA, December 14, 2006). The piston was characterized and disposed off-site by the City of Dayton during the initial demolition phase of this project and therefore further sampling of the concrete attached to the piston is not possible.

The work plan proposed installing one soil boring on the northwest (i.e. hydraulically downgradient) side of this feature, collecting soil samples from the 0-2 foot interval, the 6-8 foot interval, the 2-foot interval immediately above the water table, and any other intervals that exhibit evidence of contamination (i.e. staining or elevated PID readings), and analyzing the samples for TCL/TAL parameters consistent with RFI sampling activities. An additional 3 soil borings will be installed surrounding the piston to the northeast, southeast, and southwest, as shown on Figure 1. Soil samples will be collected from any intervals that exhibit evidence of contamination (i.e. staining or elevated PID readings), and analyzed for TCL/TAL parameters consistent with RFI sampling activities.

Section 1.2.5 AOI 41 - Building 1 Vertical Pipe Proposed Post-Removal Samples

2. GM should provide further justification for their decision to locate the single soil boring in this location to the southwest of the concrete footer. Additional detail on historic usage of this feature and/or the presence of staining on the concrete might be helpful in determining the most likely location of environmental contamination (if present). If further rationale cannot be provided, collection of surface soil samples on each side of the footer is recommended. Sampling of deeper intervals as proposed should then be conducted where the most significant surface soil contamination was identified.

GM Response: The Building 1 Vertical Pipe was a pipe, not a concrete footer. As discussed in the report text and as shown on photographs presented in Appendix B of the RFI Addendum 1 (CRA, December 14, 2006), this pipe was visibly clean and the PCB concentration of the gravel within the pipe was very low (0.67 mg/kg). The pipe was disposed off-site by the City of Dayton and therefore further sampling of the gravel attached to the piston is not possible.

The work plan proposed installing two soil borings on the northwest (i.e. hydraulically downgradient) and southwest sides of this feature, which were also adjacent to the Blue/Green Soil Area (AOI 45), and collecting soil samples from the 0-2 foot interval, the 6-8 foot interval, the 2-foot interval immediately above the water table, and any other intervals that exhibit evidence of contamination (i.e. staining or elevated PID readings), and analyzing the samples for TCL PCBs. An additional 2 soil borings will be installed surrounding the pipe to the northeast and southeast, as shown on Figure 1. Soil samples will be collected from any intervals that exhibit evidence of contamination (i.e. staining or elevated PID readings), and analyzed for TCL PCBs.

Section 1.3.4 AOI 44 - Building 12B Free Product Post-Removal Samples

3. GM should provide additional clarification on the proposed sampling intervals for additional soil borings at AOI 44. As noted in their response to EPA Comment 5, GM indicates that samples will be collected "from intervals at the surface, immediately above the water table, at the location of evidence of potential contamination if any, and a depth consistent with the elevation of [soil boring] FP-2." EPA's previous comment recommended delineation of stained soil uncovered in boring location FP-1 at a depth of 6-8 feet below ground surface (bgs). Thus, this depth should be specifically targeted among the proposed sample intervals. However, because elevated antimony, copper, lead, and zinc concentrations were reported at a depth of 3 feet bgs at location FP-2, this

depth should also be targeted for further sampling. The work plan should be revised accordingly.

GM Response: The work plan proposed installing one soil boring within the former excavation and four soil borings surrounding the former excavation, collecting samples from the 0-2 foot interval, the 2-foot interval immediately above the water table, at the location of any evidence of potential contamination (e.g. staining), and a depth consistent with FP-2. Sample FP-2 was collected at a depth of 3 feet below the bottom of the excavation, which was 3 feet deep. Therefore, the 2-4 foot interval will be sampled at the boring within the excavation, and the 6-8 foot interval will be sampled at the borings surrounding the excavation. Stained soil was identified at FP-1 at a depth of 6-8 feet below the bottom of the excavation, which was 3 feet deep. Therefore, the 6-8 foot interval will be sampled at the boring within the excavation, and the 10-12 foot interval will be sampled at the borings surrounding the excavation. If these sample intervals are within 2 feet of the water table (as anticipated), no separate sample will be collected immediately above the water table. Samples will be analyzed for TCL/TAL parameters.

Section 1.4.5 AOI 45 - Blue-Green Soil Area Proposed Post-Removal Samples

4. The reference to Section 2.5 in this paragraph should be corrected to cite Section 1.2 of the Revised Work Plan.

GM Response: Agreed.

COMMENT ON ATTACHMENT A

1. GM has provided generally adequate responses to EPA's August 18, 2008, comments on RFI Addendum 1 and the Work Plan for Additional Delineation Sampling. However, for completeness, GM should provide more detailed discussion of risk implications at the various PCB-contaminated AOIs, rather than simply stating that "the PCB concentrations identified are within the range of PCB concentrations [previously identified] in soil between Webster and Taylor Streets." Furthermore, EPA reserves the right to request additional investigation, should it become necessary based on resolution of T-trench issues and final risk assessment determinations which are currently being conducted independently of the revised work plan.

GM Response: The statement quoted in this comment was intended to explain that the concentrations of PCBs detected in the vicinity of the new AOIs addressed in RFI Addendum 1 are entirely consistent with the soil characterization data collected during earlier phases of the RFI field investigation, and as such, do not indicate that the new concentrations found are necessarily associated with the new AOIs. PCB concentrations in soil samples collected during previous phases of the RFI within approximately 100 feet of the newly discovered AOIs have ranged from non-detect to 134 ppm. In any case, all the RFI soil characterization data, including the PCB data, were evaluated in the baseline risk assessment contained in RFI Report Addendum 3 which was submitted in September 2008. GM's response, dated January 17, 2009, to U.S. EPA's August 18, 2008 comments is attached for reference.

GM'S RESPONSE DATED JANUARY 17, 2009

TO U.S. EPA'S AUGUST 18, 2008
COMMENTS OF TECHNICAL REVIEW
ON THE JULY 10, 2007 DOCUMENT ENTITLED
"RESPONSE TO EPA'S JANUARY 11, 2007, EMAIL COMMENTS"

GENERAL MOTORS CORPORATION FORMER DELPHI HARRISON THERMAL SYSTEMS FACILITY DAYTON, OHIO

Booz Allen Hamilton (Booz Allen) has conducted a technical review of the General Motors Corporation's (GM's) July 10, 2007, response to EPA's January 11, 2007, email comments on Addendum 1 to the Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) Report and the associated Work Plan for Additional Delineation Sampling for GM's Former Delphi Harrison Thermal Systems Facility in Dayton, Ohio. As directed by the U.S. Environmental Protection Agency (EPA), this review was limited to issues pertaining to management and remediation of polychlorinated biphenyls (PCBs) under the Toxic Substances Control Act (TSCA), and specifically excluded comments focusing on the storm sewer system and associated deed restrictions. Comments resulting from this review are presented below; discussion follows the order of responses in the emails.

EPA Comment 1: Lack of sampling of excavation sidewalls at Area of Interest (AOI) 45 – Blue-Green Soil Area. Post-sampling total PCB concentrations for the excavation floor are 7.8, 35, and 21 parts per million (ppm) in this location.

GM Response: The blue-green material was visually delineated and removed by the City of Dayton. The main reason GM collected samples from this area was because material at depth was potentially to be left at surface and this would impact the risk assessment. SB-126-04 is located on the south wall and PCB results were 0.264 and 0.858 milligrams per kilogram (mg/kg) at 8-10 feet below ground surface (bgs). SB-127-04 is located approximately 40 feet to the northwest and PCB results were 0.644 mg/kg at 8-10 feet bgs and 0.534 mg/kg at 14-16 feet bgs.

Adequacy of Response/Remaining Issues: Table 3.1 of Addendum 1 to the RFI Report indicates that that the routine worker direct contact exposure pathway is not applicable to RFI sub-area SB-126-04, which includes AOI 45. However, if the potential exists that material at depth will remain exposed within the excavation area (as indicated in GM's response), the risk assessment should be revised to include this pathway for exposure to residual PCB concentrations in soil. Furthermore, prior to completing further risk assessment calculations or risk management options (e.g., backfilling the excavation), additional confirmation sampling should be conducted at AOI 45. Additional samples should be collected from the excavation floor to ensure that the maximum residual PCB concentrations have been identified, and at various depths beneath the floor to evaluate whether PCB contamination extends vertically to groundwater. Although helpful, available data from soil borings SB-126-04 and SB-127-04 do not fully delineate the lateral extent of

PCB contamination remaining in place. Additional soil samples should be collected to close this data gap, particularly on the east side of the excavation adjacent to sample location SB 2, where the highest PCB concentrations were previously reported. This sampling effort should follow all appropriate provisions for cleanup confirmation sampling in 40 CFR Part 761, Subpart O. Although this subpart is not directly applicable given GM's risk-based approach to cleanup under 40 CFR Section 761.61(c), it provides valid guidance on sampling for TSCA purposes and should be used by GM to establish a more representative set of confirmation sampling locations. Finally, the potential for leaching of residual PCB and other constituents of interest (COIs) concentrations in soil and/or concrete to underlying groundwater should be considered in terms of potential human health risks.

<u>GM Response</u>: The PCB concentrations identified are within the range of PCB concentrations in soil between Webster and Taylor Streets (non-detect to 272 mg/kg at SB-109-04). However, GM will install one soil boring adjacent to sample location SB 2 and two soil borings to the east to further delineate PCB concentrations in this area (see Figure 1). One of the soil borings will also be near the former vertical pipe. Soil borings will be completed to the water table and, consistent with RFI sampling protocol, samples will be collected from intervals at the surface, immediately above the water table, at the location of evidence of potential contamination if any, and at 6-8 feet depth consistent with the sample from SB 2. Samples will be analyzed for TCL PCBs.

EPA Comment 2: No sidewall samples were taken at AOI 39 - Building 12B Sump.

GM Response: Sidewall samples were not taken because this was a very shallow excavation and there were no real sidewalls. The sump itself was approximately 4 feet deep, but after concrete removal and related activities conducted by the City, there was only a small depression a foot or two deep. The PCB concentration of the post-excavation sample was only 2.1 ppm, but SB-57 and SB-57R are located within 5 feet to the east and there are much higher PCB concentrations in these soil borings.

Adequacy of Response/Remaining Issues: Figure 4.2A(ii) of the RFI Report confirms that PCB concentrations detected at borings SB-57-02 (54.7 ppm) and SB-57R-03 (25.4 ppm) were higher than those reported in the post-removal confirmation sample from location SP-1 (1.2 ppm, as indicated in Addendum 1). Furthermore, although GM's risk assessment methodology has yet to be approved, Table 3.1 indicates no unacceptable human health risks for RFI sub-area SB-57-02—even when the higher PCB concentrations are factored into risk calculations (as shown in Appendix E2, page 8 of 12). Based on this information and the shallow depth of the final excavation, the response to this comment is adequate. However, it would be useful for GM to provide additional discussion on whether sludge in the sump was released to the slab when the unit was dropped onto the adjacent slab. GM should also indicate how any such releases were addressed, how the slab was confirmed to be successfully cleaned, and whether that portion of the slab was subsequently removed or remains in place. If the slab remains in place and was contaminated during the accident, the residual concentrations of any site-specific COIs in the concrete must also be considered in the risk assessment.

<u>GM Response</u>: GM was not present when the City dropped the sump and does not know the exact location on the concrete slab where the sump fell. When GM arrived on site, the sump was wrapped in plastic and placed in the City's PCB storage area. There is no evidence of sludge on the remaining concrete slab.

EPA Comment 3: One sidewall sample at AOC 42 – Building 12B Underground Storage Tank (UST) 1 has 21 ppm PCBs.

GM Response: This is the east sidewall adjacent to UST 3. GM has submitted a removal work plan for UST 3, which includes sampling and analysis for PCBs.

Adequacy of Response/Remaining Issues: Although Booz Allen has not had the opportunity to review the Work Plan dated November 3, 2006 for removal of UST 3, GM's proposal to conduct the action in a similar manner to that performed for UST 1 (AOI 42) is conceptually acceptable (RFI Addendum 1, Section 2.13.3). However, three specific issues must be addressed by GM during removal of UST 3:

- As GM indicates, the highest post-removal PCB detection at AOI 42 was identified on
 the eastern sidewall of the excavation, within approximately two feet of the Building 12B
 UST 3 footprint. Due to the close proximity between the tanks, GM should consider
 removal of previously identified PCB-impacted soil around AOI 42 sampling location
 S-011 as part of the tank removal effort. GM should also conduct additional vertical
 delineation sampling at depth intervals greater than 6 feet bgs (similar to that proposed
 for borings in the Work Plan for Additional Delineation Sampling) to obtain greater
 information on the vertical extent of PCBs observed at location S-011 in August 2006.
- GM should ensure that water from the UST still in place at AOI 48 (Building 12B UST 3) is properly managed, treated, and disposed. This water appears to be regulated under both TSCA and RCRA, based on measured concentrations of PCBs and vinyl chloride in the City's water sample collected on August 29, 2006. Dilution is an impermissible activity under both regulatory programs and will not be acceptable as a means for managing PCB-containing water in the tank.
- GM should provide additional detail as to whether the concrete block wall will also be removed as part of the tank removal effort. To ensure compliance with TSCA, support ongoing risk assessment efforts, and guide corrective measures at the Site, the "as-found" concentration of PCBs in that concrete wall should be determined prior to removal, or during confirmation sampling if the wall is to remain in place. GM should ensure that characterization and confirmation sampling in this location is conducted in accordance with relevant guidance in 40 CFR Part 761, Subparts N and O, respectively.

<u>GM Response</u>: An updated Work Plan for removal of UST 3 is presented in this document. This work plan has been revised to specify that the western sidewall sample will be collected from a depth greater than S-011 and to specify that foundation walls adjacent to the UST will be sampled. Given that the PCB concentration in sample S-011 is within the range of PCB concentrations in soil between Webster and Taylor Streets (non-detect to 272 mg/kg at SB-109-04), for which a risk assessment has been conducted, GM will consider soil removal only

if the concentration of PCBs in the soil samples to be collected are higher than those already evaluated in the risk assessment. The work plan already specifies that water would be containerized, sampled for waste characterization, and disposed of off-site in accordance with applicable regulations. Given that water in the UST is believed to be perched runoff and the City's sample was collected over 2 years ago, GM believes that characterization of the water at the time of UST removal is more appropriate for waste disposal.

EPA Comment 4: One sidewall sample at AOC 43 - Building 22 UST has 19 ppm PCBs.

GM Response: This is the eastern sidewall. The PCB concentrations for the other sidewall samples range from ND to 3.9J mg/kg. The nearest samples to the east are SB-123 (approximately 30 feet northeast) and T-025 (approximately 25 feet southeast). The PCB concentrations at these locations are non-detect (0.039 ppm) to 0.283 ppm, and 10 ppm, respectively.

Adequacy of Response/Remaining Issues: Additional evaluation of the lateral extent of contamination at AOC 43 does not appear to be warranted, given the proximity of other sampling locations both within the excavation and to the east, as identified in GM's response. However, additional vertical delineation is recommended in the vicinity of the excavation and toward the southeast to determine if underlying groundwater has been impacted by PCBs.

GM Response: The statement quoted in this comment was intended to explain that the concentrations of PCBs detected in the vicinity of the new AOIs addressed in RFI Addendum 1 are entirely consistent with the soil characterization data collected during earlier phases of the RFI field investigation, and as such, do not indicate that the new concentrations found are necessarily associated with the new AOIs. PCB concentrations in soil samples collected during previous phases of the RFI within approximately 100 feet of the newly discovered AOIs have ranged from non-detect to 134 ppm. In addition, an extensive network of monitoring wells along the western property boundary already monitors groundwater downgradient of this area, and the monitoring data from this network of monitoring wells do not indicate that groundwater is affected by PCBs. Therefore, groundwater investigation targeted toward this location (S-017) is unwarranted.

EPA Comment 5: AOI 44 Building 12 B Free Product – Does GM know where the free product is coming from? Water was observed seeping into the excavation – was this ground water? Staining was observed at certain depth, but did not sample to determine if PCBs are present. There were no side wall samples taken after the 3 feet excavation. The work plan proposed five boreholes which is acceptable, however if the area has not been backfilled, a sample must be taken from the stained area underneath the unstained soil to determine the concentration of PCBs.

GM Response: The free product is believed to be oil that seeped into the ground and collected in the gravel backfill surrounding a footer. The process that originally released the oil is unknown. Similarly, the water that seeped into the excavation is too shallow to be groundwater, and is believed to be rainwater that infiltrated and collected within the gravel backfill surrounding a footer. The staining observed at 6-8 ft bgs was sampled (FP-1) and

the PCB concentration was 6 ppm. (Note, while the PCB results were presented in RFI Addendum 1 Figure 2.10, the PCB results were inadvertently omitted from the Work Plan Figure 3.)

Adequacy of Response/Remaining Issues: The response to this comment is adequate. However, collection of sidewall samples from the area of excavation is warranted, in addition to the five boreholes proposed in the Work Plan for Additional Delineation Sampling. Such samples will help to delineate the lateral extent of PCB and COI contamination and are most likely to show elevated levels of contamination associated with the free product previously observed. Additional vertical contaminant delineation is warranted within the excavation area. Of the four soil samples collected to date, only one (FP-1) was collected at depths greater than 3 feet bgs, and none of the samples were collected deeper than 8 feet bgs. GM should advance deeper boreholes within the excavation, with sampling depths as proposed for boreholes surrounding the excavation. Samples within the excavation should be used to ascertain whether the stained soil observed at location FP-1 (beneath the clean soil layer) is widespread across the AOI and whether groundwater has been impacted. Confirmation sampling within the excavation should follow all applicable guidance from 40 CFR Part 761, Subpart O.

GM Response: The statement quoted in this comment was intended to explain that the concentrations of PCBs detected in the vicinity of the new AOIs addressed in RFI Addendum 1 are entirely consistent with the soil characterization data collected during earlier phases of the RFI field investigation, and as such, do not indicate that the new concentrations found are necessarily associated with the new AOIs. PCB concentrations in soil samples collected during previous phases of the RFI within approximately 100 feet of the newly discovered AOIs have ranged from non-detect to 134 ppm.). However, GM will install one soil boring within the former excavation and four soil borings surrounding the excavation to further delineate PCB concentrations in this area. Soil borings will be completed to the water table and, consistent with RFI sampling protocol, samples will be collected from intervals at the surface, immediately above the water table, at the location of evidence of potential contamination if any, and a depth consistent with the elevation of FP-2. Samples will be analyzed for TCL/TAL parameters.

EPA Comment 6: At AOI 47 – Building 12B T-Trench and AOI 36 – Building 15 T-Trench, since they found sludges that contain greater than 50 ppm PCBs, the whole trench must be removed, and perform post sampling which includes the floor and side walls.

GM Response: Our current work plan proposed that GM would remove the trench contents and sample beyond the concrete if there was evidence of a release from the trench, and the City would be responsible for the trench structure. This is currently on hold pending discussion with the City regarding their letter to U.S. EPA.

Adequacy of Response/Remaining Issues: Refer to comments submitted under separate cover on the T-Trench Work Plan for further discussion of this issue.

<u>GM Response</u>: GM has responded to comments on the T-Trench Work Plan in a separate document.

DRAFT

EPA Comment 7: The post sampling results for PCBs may change the RFI Sub-Areas Risk and hazard quotient estimates.

GM Response: GM would re-evaluate the risk after collecting additional samples, in the same manner as in RFI Addendum 1.

Adequacy of Response/Remaining Issues: Pending EPA approval of GM's risk assessment methodology, the response to this comment is adequate.

GM Response: No response necessary.

ATTACHMENT B



Laura Funk WESTON SOLUTIONS 2566 Kohnle Drive Miamisburg, OH 45342-3669 Job Number: 06.15339 Report Date: 09/06/2006

Page: 1 of 13

Enclosed are the Analytical and Quality Control Reports for the following samples submitted to TestAmerica for analysis:

Project: Tech Town

Sample	Sample Description	Date	Date
Number		<u>Taken</u>	<u>Received</u>
218254	WC-82906-01-04	08/29/2006	08/29/2006

The Quality Control report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

TestAmerica certifies that the analytical results contained herein apply only to the specific samples analyzed. Reproduction of this report is permitted only in its entirety.

Enclosure

Project Management Approval

Dayton - 3601 South Dixie Drive, Dayton, OH 45439 937-294-6856/FAX:937-294-7816

Dundee (Chicago) - 1090 Rock Road Lane, Unit 11, Dundee, IL 60118 847-783-4960/FAX:847-783-4969

Indianapolis - 6964 Hillsdale Court, Indianapolis, IN 46250 317-842-4261/FAX:317-842-4286

Pontiac - 341 W. Walton Blvd, Pontiac, MI 48340 248-332-1940/FAX:248-332-5450



Laura Funk WESTON SOLUTIONS 2566 Kohnle Drive Miamisburg, OH 45342-3669

Job Number: 06.15339 Report Date: 09/06/2006 Page: 2 of 13

SAMPLE NO. 218254

SAMPLE DESCRIPTION WC-82906-01-04

DATE/TIME TAKEN 08/29/2006 15:50

			Reporting		Run	Run	Dwan	Divin	27	Y - h	**	
	Result	Units	Limit	Flag		Time	Prep	Run	Anal.		Method	
	Kesuic	OHILLS	DIMITE	rag	Date	Time	Baccn	Batch	Init.	ID	Reference	
Prep, Base Neutral	SW 3520		Complete	Z	08/30/2006		2778		tad	DT		
Prep, Acid Extractable	SW 3520		Complete	Z	08/30/2006		2778		tad	DT		
Prep, PCBs Aqueous 8082	SW 3520		Complete	Z	08/30/2006		1972		tad	DT		
VOLATILE COMPOUNDS - 8260	(AQ)											
Acetone	<20.0	ug/L	<20.0		09/05/2006			9279	jpp	DT	SW 8260B	
Benzene	<1.0	ug/L	<1.0		09/05/2006			9279	jpp	DT	SW 8260B	
tert-Butylbenzene	<1.0	ug/L	<1.0		09/05/2006			9279	jpp	DT	SW 8260B	
sec-Butylbenzene	<1.0	ug/L	<1.0		09/05/2006			9279	jpp	DT	SW 8260B	
n-Butylbenzene	<1.0	ug/L	<1.0		09/05/2006			9279	jpp	DT	SW 8260B	
Bromochloromethane	<1.0	ug/L	<1.0		09/05/2006			9279	jpp	DT	SW 8260B	
Bromodichloromethane	<1.0	ug/L	<1.0		09/05/2006			9279	jpp	DT	SW 8260B	
Bromoform	<1.0	ug/L	<1.0		09/05/2006			9279	jpp	DT	SW 8260B	
Bromobenzene	<1.0	ug/L	<1.0		09/05/2006			9279	jpp	DT	SW 8260B	
2-Butanone (MEK)	<12.5	ug/L	<12.5		09/05/2006			9279	ipp	DT	SW 8260B	
Carbon disulfide	<1.0	ug/L	<1.0		09/05/2006			9279	ipp	DT	SW 8260B	
Carbon tetrachloride	<1.0	ug/L	<1.0		09/05/2006			9279	qqt	DT	SW 8260B	
Chlorobenzene	<1.0	ug/L	<1.0		09/05/2006			9279	gqt	DT	SW 8260B	
Chloroethane	<5.0	ug/L	<5.0		09/05/2006			9279	jpp	DT	SW 8260B	
2-Chlorotoluene	<1.0	ug/L	<1.0		09/05/2006			9279	jpp	DT	SW 8260B	
4-Chlorotoluene	<1.0	ug/L	<1.0		09/05/2006			9279	jpp	DT	SW 8260B	
Chloroform	<1.0	ug/L	<1.0		09/05/2006			9279		DT	SW 8260B	
Chloromethane	<5.0	ug/L	<5.0		09/05/2006			9279		DT	SW 8260B	
Dibromochloromethane	<1.0	ug/L	<1.0		09/05/2006			9279		DT	SW 8260B	
Dibromomethane	<1.0	ug/L	<1.0		09/05/2006			9279	7.77	DT	SW 8260B	
Dichlorodifluoromethane	<1.0	ug/L	<1.0		09/05/2006			9279		DT	SW 8260B	
1,2-Dichlorobenzene	<1.0	ug/L	<1.0		09/05/2006					DT	SW 8260B	
1,3-Dichlorobenzene	<1.0	ug/L	<1.0		09/05/2006					DT	SW 8260B	
1,4-Dichlorobenzene	<1.0	ug/L	<1.0		09/05/2006					DT	SW 8260B	
1,1-Dichloroethane	<1.0	ug/L	<1.0		09/05/2006					DT	SW 8260B	
1,2-Dichloroethane	<1.0	ug/L	<1.0		09/05/2006					DT	SW 8260B	
1,1-Dichloroethene	<1.0	ug/L	<1.0		09/05/2006					DT	SW 8260B	
cis-1,2-Dichloroethene	<1.0	ug/L	<1.0		09/05/2006					DT	SW 8260B	
trans-1,2-Dichloroethene	<1.0	ug/L	<1.0		09/05/2006					DT	SW 8260B	

Z - Insufficient sample for MS/MSD.

Lab ID: CH = Chicago (Dundee), DT = Dayton, IN = Indianapolis, PT = Pontiac, SUB = Subcontracted, CLT = Client Data



Laura Funk WESTON SOLUTIONS 2566 Kohnle Drive Miamisburg, OH 45342-3669

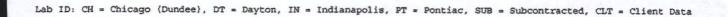
Job Number: 06.15339 Report Date: 09/06/2006 Page: 3 of 13

SAMPLE NO. 18254

SAMPLE DESCRIPTION WC-82906-01-04

DATE/TIME TAKEN 08/29/2006 15:50

			Reportin	g	Run	Run	Prep	Run	Anal.	Lab	Metho	bc	
	Result	Units	Limit	Flag	Date	Time	Batch	Batch	Init.	ID	Refer	rence	
2-Dichloropropane	<1.0	ug/L	<1.0		09/05/2006	;		9279	jpp	DT	SW 82	260B	
1,3-Dichloropropane	<1.0	ug/L	<1.0		09/05/2006			9279	jpp	DT	SW 82	260B	
2,2-Dichloropropane	<1.0	ug/L	<1.0		09/05/2006			9279	qqt	DT	SW 82	260B	
1-Dichloropropene	<1.0	ug/L	<1.0		09/05/2006			9279	jpp	DT	SW 82	260B	
s-1,3-Dichloropropene	<1.0	ug/L	<1.0		09/05/2006			9279	jpp	DT	SW 82	260B	
trans-1,3-Dichloropropene	<1.0	ug/L	<1.0		09/05/2006			9279	jpp	DT	SW 82	260B	
Ethylbenzene	<1.0	ug/L	<1.0		09/05/2006			9279	ggt	DT	SW 82	260B	
xachlorobutadiene	<5.0	ug/L	<5.0		09/05/2006			9279	jpp	DT	SW 82	260B	
Hexane	<5.0	ug/L	<5.0		09/05/2006			9279	ggt	DT	SW 82	260B	
2-Hexanone	<12.5	ug/L	<12.5		09/05/2006			9279	qqt	DT	SW 82	60B	
ppylbenzene (Cumene)	<1.0	ug/L	<1.0		09/05/2006			9279	ggt	DT	SW 82	60B	
propyltoluene	<1.0	ug/L	<1.0		09/05/2006			9279	jpp	DT	SW 82	60B	
bromomethane	<5.0	ug/L	<5.0		09/05/2006			9279	jpp	DT	SW 82	60B	
Methylene chloride	<5.0	ug/L	<5.0		09/05/2006			9279	jpp	DT	SW 82	60B	
thyl-tert butyl ether (MTBE)	<5.0	ug/L	<5.0		09/05/2006			9279	jpp	DT	SW 82	60B	
Methyl-2-pentanone (MIBK)	<12.5	ug/L	<12.5		09/05/2006			9279	jpp	DT	SW 82	60B	
n-Propylbenzene	<1.0	ug/L	<1.0		09/05/2006			9279	ggt	DT	SW 82	60B	
Styrene	<1.0	ug/L	<1.0		09/05/2006			9279	jpp	DT	SW 82	60B	
. 1,2-Tetrachloroethane	<1.0	ug/L	<1.0		09/05/2006			9279	jpp	DT	SW 82	60B	
1 ,2,2-Tetrachloroethane	<1.0	ug/L	<1.0		09/05/2006			9279	jpp	DT	SW 82	60B	
Tetrachloroethene	<1.0	ug/L	<1.0		09/05/2006			9279	jpp	DT	SW 82	60B	
Toluene	<1.0	ug/L	<1.0		09/05/2006			9279	jpp	DT	SW 82	60B	
12,4-Trichlorobenzene	<5.0	ug/L	<5.0		09/05/2006			9279	ipp	DT	SW 82	60B	
1 ,1-Trichloroethane	<1.0	ug/L	<1.0		09/05/2006			9279	qqt	DT	SW 82	60B	
1,1,2-Trichloroethane	<1.0	ug/L	<1.0		09/05/2006			9279	jpp	DT	SW 82	60B	
Twichloroethene	<1.0	ug/L	<1.0		09/05/2006			9279	jpp	DT	SW 82	60B	
1 chlorofluoromethane	<1.0	ug/L	<1.0		09/05/2006			9279	jpp	DT	SW 82		
1,2,4-Trimethylbenzene	<1.0	ug/L	<1.0		09/05/2006			9279	jpp	DT	SW 82		
1,3,5-Trimethylbenzene	<1.0	ug/L	<1.0		09/05/2006			9279	jpp	DT	SW 82		
Veryl acetate	<5.0	ug/L	<5.0		09/05/2006			9279	jpp	DT	SW 82		
V yl chloride	898	ug/L	<100		09/03/2006				prb	DT	SW 82		
Xylenes, Total	4,650	ug/L	<200		09/03/2006				prb	DT	SW 82	Villa Inc.	
Surr: 1,2-Dichloroethane-d4	80-120	*	80-120		09/05/2006			9279	jpp	DT	SW 82		
Ser: Dibromofluoromethane	86-118	*	86-118		09/05/2006			9279	jpp	DT	SW 82	100	
					., .,,				SEE		JII 02	-04	





Laura Funk WESTON SOLUTIONS 2566 Kohnle Drive Miamisburg, OH 45342-3669

Job Number: 06.15339 Report Date: 09/06/2006

Page: 4 of 13

SAMPLE NO. 218254

SAMPLE DESCRIPTION WC-82906-01-04

DATE/TIME TAKEN 08/29/2006 15:50

			Reportin	na	Run	Run	Prep	Run	Anal.	r.ah	Method	
	Result	Units	Limit	Flag	Date	Time		Batch				
		Onico	Dama C	rag	Date	TIME	Baccii	Batch	Init.	TD	Reference	
Surr: Toluene-d8	88-110		88-110		09/05/2006			9279	jpp	DT	SW 8260B	
Surr: 4-Bromofluorobenzene	86-115		86-115		09/05/2006			9279	jpp	DT	SW 8260B	
BASE NEUTRAL COMP. (AQ) 8270												
Acenaphthene	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
Acenaphthylene	<10	ug/L	<10		08/31/2006		2778	5546	irw	DT	SW 8270C	
Anthracene	<10	ug/L	<10		08/31/2006		2778	5546	izw	DT	SW 8270C	
Benzo (a) anthracene	<10	ug/L	<10		08/31/2006		2778	5546	izw	DT	SW 8270C	
Benzo(b) fluoranthene	<10	ug/L	<10		08/31/2006		2778	5546	irw	DT	SW 8270C	
Benzo(k)fluoranthene	<10	ug/L	<10		08/31/2006		2778	5546	irw	DT	SW 8270C	
Benzo(a)pyrene	<10	ug/L	<10		08/31/2006		2778	5546	irw	DT	SW 8270C	
Benzo(ghi)perylene	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
Benzyl alcohol	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
Benzyl butyl phthalate	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
bis(2-Chloroethyl)ether	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
bis(2-Chloroethoxy)methane	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
bis(2-Ethylhexyl)phthalate	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
bis(2-chloroisopropyl)ether	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
4-Bromophenyl phenyl ether	<10	ug/L	<10		08/31/2006		2778	5546	irw	DT	SW 8270C	
4-Chloroaniline	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
2-Chloronaphthalene	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
Chrysene	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
Dibenz(a,h)anthracene	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
Dibenzofuran	<10	ug/L	<10		08/31/2006		2778	5546	irw	DT	SW 8270C	
1,2-Dichlorobenzene	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
1,3-Dichlorobenzene	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
1,4-Dichlorobenzene	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
Diethyl phthalate	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
Dimethyl phthalate	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
2,4-Dinitrotoluene	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
2,6-Dinitrotoluene	<10	ug/L	<10		08/31/2006				irw	DT	SW 8270C	
Di-n-octylphthalate	<10	ug/L	<10		08/31/2006		2778		jrw	DT	SW 8270C	
Fluoranthene	<10	ug/L	<10		08/31/2006		2778		irw	DT	SW 8270C	
Fluorene .	<10	ug/L	<10		08/31/2006		2778		irw	DT	SW 8270C	

Lab ID: CH = Chicago (Dundee), DT = Dayton, IN = Indianapolis, PT = Pontiac, SUB = Subcontracted, CLT = Client Data



Laura Funk WESTON SOLUTIONS 2566 Kohnle Drive Miamisburg, OH 45342-3669 Job Number: 06.15339 Report Date: 09/06/2006

Page: 5 of 13

SAMPLE NO.

SAMPLE DESCRIPTION WC-82906-01-04

DATE/TIME TAKEN 08/29/2006 15:50

Triban a second			Reportin	g	Run	Run	Prep	Run	Anal.	Lab	Method	
	Result	Units	Limit	Flag	Date	Time	Batch	Batch	Init.	ID	Reference	
xachlorobenzene	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	S₩ 8270C	
Hexachlorocyclopentadiene	<20	ug/L	<20		08/31/2006		2778	5546	jrw	DT	SW 8270C	
Hexachloroethane	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
deno (1,2,3-cd) pyrene	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
ophorone	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
Naphthalene	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
trobenzene	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
Nitrosodi-n-propylamine	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
menanthrene	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
Pyrene	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
-Trichlorobenzene	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
gate: d5-Nitrobenzene	24	*	35-124	W	08/31/2006		2778	5546	jrw	DT	SW 8270C	
Surrogate: 2-Fluorobiphenyl	82	*	43-134		08/31/2006		2778	5546	jrw	DT	SW 8270C	
Surrogate: dl4-Terphenyl	66	*	34-149		08/31/2006		2778	5546	jrw	DT	SW 8270C	
ID COMPOUNDS (AQ) 8270												
Benzoic acid	<50	ug/L	<50		08/31/2006		2778	5546	jrw	DT	SW 8270C	
4-Chloro-3-methylphenol	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
Chlorophenol	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
4-Dichlorophenol	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
2,4-Dimethylphenol	336	ug/L	<100		09/05/2006		2778	5547	jcs	DT	SW 8270C	
Methyl-4,6-dinitrophenol	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
Methylphenol	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
ta & para-Methylphenol	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
2-Nitrophenol	<10	ug/L	<10		08/31/2006		2778	5546	irw	DT	SW 8270C	
ntachlorophenol	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
enol	<10	ug/L	<10		08/31/2006		2778	5546	irw	DT	SW 8270C	
2,4,5-Trichlorophenol	<10	ug/L	<10		08/31/2006		2778	5546	irw	DT	SW 8270C	
2,4,6-Trichlorophenol	<10	ug/L	<10		08/31/2006		2778	5546	jrw	DT	SW 8270C	
rogate: d6-Phenol	95	8	10-149		08/31/2006		2778	5546	jrw	DT	SW 8270C	
rrogate: 2-Fluorophenol	0	*	21-145	W	08/31/2006		2778	5546	irw	DT	SW 8270C	
Surrogate: Tribromophenol	82	*	21-146		08/31/2006		2778	5546	jrw	DT	SW 8270C	
PCB's M 8082. Aqueous	-				-5,52,5000			0010	,		J., 02.70C	
Color 1016	<10.0	ug/L	<0.20	£	09/05/2006		1972	803	clh	DT	SW 8082	
1010	140.0	wg/ 2	40.20	-	57/05/2000			000	444	-	J. 0002	

⁻ Surrogate is outside of control limits.

Lab ID: CH = Chicago (Dundee), DT = Dayton, IN = Indianapolis, PT = Pontiac, SUB = Subcontracted, CLT = Client Data

Elevated value due to high levels of target analytes.



Laura Funk WESTON SOLUTIONS 2566 Kohnle Drive Miamisburg, OH 45342-3669 Job Number: 06.15339 Report Date: 09/06/2006

Page: 6 of 13

SAMPLE NO. 218254

SAMPLE DESCRIPTION WC-82906-01-04 DATE/TIME TAKEN 08/29/2006 15:50

			Reporting	9	Run	Run	Prep	Run	Anal.	Lab	Method	
	Result	Units	Limit	Flag	Date	Time	Batch	Batch	Init.	ID	Reference	
Aroclor 1221	<10.0	ug/L	<0.20	£	09/05/2006		1972	803	clh	DT	SW 8082	
Aroclor 1232	<10.0	ug/L	<0.20	£	09/05/2006		1972	803	clh	DT	SW 8082	
Aroclor 1242	<10.0	ug/L	<0.20	f	09/05/2006		1972	803	clh	DT	SW 8082	
Aroclor 1248	<10.0	ug/L	<0.20	£	09/05/2006		1972	803	clh	DT	SW 8082	
Aroclor 1254	60.2	ug/L	<0.20	£	09/05/2006		1972	803	clh	DT	SW 8082	
Aroclor 1260	<10.0	ug/L	<0.20	f	09/05/2006		1972	803	clh	DT	SW 8082	
Surrogate: DCB	n/a	*		g	09/05/2006		1972	803	clh	DT	SW 8082	
Surrogate: TCX	DL	*		g	09/05/2006		1972	803	clh	DT	SW 8082	
DRO Fingerprint Scan Prep	complete		Complete		08/30/2006		20		tad	DT		
DRO Fingerprint Scan	Complete		See Text		09/02/2006		20	91	twm	DT	SW 8015 (M	(bol

f - Elevated value due to high levels of target analytes.

g - Surrogate was diluted out during analysis.



Laura Funk WESTON SOLUTIONS 2566 Kohnle Drive Miamisburg, OH 45342-3669 Job Number: 06.15339 Report Date: 09/06/2006 Page: 7 of 13

	Prep	Run					
	Batch	Batch	Blank		Date	Date	
Analyte	Number	Number	Result	Units	Prepped	Analyzed	
VOLATILE COMPOUNDS - 8260 (AQ)							
Vinyl chloride		9278	<1.0	ug/L		09/03/2006	
Xylenes, Total		9278	<2.0	ug/L		09/03/2006	
VOLATILE COMPOUNDS - 8260 (AQ)							
Acetone		9279	<20.0	ug/L		09/05/2006	
Benzene		9279	<1.0	ug/L		09/05/2006	
tert-Butylbenzene		9279	<1.0	ug/L		09/05/2006	
sec-Butylbenzene		9279	<1.0	ug/L		09/05/2006	
n-Butylbenzene		9279	<1.0	ug/L		09/05/2006	
Bromochloromethane		9279	<1.0	ug/L		09/05/2006	
Bromodichloromethane		9279	<1.0	ug/L		09/05/2006	
Bromoform		9279	<1.0	ug/L		09/05/2006	
Bromobenzene		9279	<1.0	ug/L		09/05/2006	
2-Butanone (MEK)		9279	<12.5	ug/L		09/05/2006	
Carbon disulfide	×	9279	<1.0	ug/L		09/05/2006	
Carbon tetrachloride		9279	<1.0	ug/L		09/05/2006	
Chlorobenzene		9279	<1.0	ug/L		09/05/2006	
Chloroethane		9279	<5.0	ug/L		09/05/2006	
2-Chlorotoluene		9279	<1.0	ug/L		09/05/2006	
4-Chlorotoluene		9279	<1.0	ug/L		09/05/2006	
Chloroform		9279	<1.0	ug/L		09/05/2006	
Chloromethane		9279	<5.0	ug/L		09/05/2006	
Dibromochloromethane		9279	<1.0	ug/L		09/05/2006	
Dibromomethane		9279	<1.0	ug/L		09/05/2006	
Dichlorodifluoromethane		9279	<1.0	ug/L		09/05/2006	
1,2-Dichlorobenzene		9279	<1.0	ug/L		09/05/2006	
1,3-Dichlorobenzene		9279	<1.0	ug/L		09/05/2006	
1,4-Dichlorobenzene		9279	<1.0	ug/L		09/05/2006	
1,1-Dichloroethane		9279	<1.0	ug/L		09/05/2006	
1,2-Dichloroethane		9279	<1.0	ug/L		09/05/2006	
1,1-Dichloroethene		9279	<1.0	ug/L		09/05/2006	
cis-1,2-Dichloroethene		9279	<1.0	ug/L		09/05/2006	
trans-1,2-Dichloroethene		9279	<1.0	ug/L		09/05/2006	
1,2-Dichloropropane		9279	<1.0	ug/L		09/05/2006	
1,3-Dichloropropane		9279	<1.0	ug/L		09/05/2006	
2,2-Dichloropropane		9279	<1.0	ug/L		09/05/2006	
1,1-Dichloropropene		9279	<1.0	ug/L		09/05/2006	
cis-1,3-Dichloropropene		9279	<1.0	ug/L		09/05/2006	
trans-1,3-Dichloropropene		9279	<1.0	ug/L		09/05/2006	



Laura Funk WESTON SOLUTIONS 2566 Kohnle Drive Miamisburg, OH 45342-3669 Job Number: 06.15339 Report Date: 09/06/2006

Page: 8 of 13

	Prep	Run					
	Batch	Batch	Blank		Date	Date	
Analyte	Number	Number	Result	Units	Prepped	Analyzed	
Ethylbenzene		9279	<1.0	ug/L		09/05/2006	
Hexachlorobutadiene		9279	<5.0	ug/L		09/05/2006	
n-Hexane		9279	<5.0	ug/L		09/05/2006	
2-Hexanone		9279	<12.5	ug/L		09/05/2006	
Isopropylbenzene (Cumene)		9279	<1.0	ug/L		09/05/2006	
p-Isopropyltoluene		9279	<1.0	ug/L		09/05/2006	
Bromomethane		9279	<5.0	ug/L		09/05/2006	
Methylene chloride		9279	<5.0	ug/L		09/05/2006	
Methyl-tert butyl ether (MTBE)		9279	<5.0	ug/L		09/05/2006	
4-Methyl-2-pentanone (MIBK)		9279	<12.5	ug/L		09/05/2006	
n-Propylbenzene		9279	<1.0	ug/L		09/05/2006	
Styrene		9279	<1.0	ug/L		09/05/2006	
1,1,1,2-Tetrachloroethane		9279	<1.0	ug/L		09/05/2006	
1,1,2,2-Tetrachloroethane		9279	<1.0	ug/L		09/05/2006	
Tetrachloroethene		9279	<1.0	ug/L		09/05/2006	
Toluene		9279	<1.0	ug/L		09/05/2006	
1,2,4-Trichlorobenzene		9279	<5.0	ug/L		09/05/2006	
1,1,1-Trichloroethane		9279	<1.0	ug/L		09/05/2006	
1,1,2-Trichloroethane		9279	<1.0	ug/L		09/05/2006	
Trichloroethene		9279	<1.0	ug/L		09/05/2006	
Trichlorofluoromethane		9279	<1.0	ug/L		09/05/2006	
1,2,4-Trimethylbenzene		9279	<1.0	ug/L		09/05/2006	
1,3,5-Trimethylbenzene		9279	<1.0	ug/L		09/05/2006	
Vinyl acetate		9279	<5.0	ug/L		09/05/2006	
Surr: 1,2-Dichloroethane-d4		9279	96	*		09/05/2006	
Surr: Dibromofluoromethane		9279	101	*		09/05/2006	
Surr: Toluene-d8		9279	99	*		09/05/2006	
Surr: 4-Bromofluorobenzene		9279	98	*		09/05/2006	
BASE NEUTRAL COMP. (AQ) 8270							
Acenaphthene	2778	5546	<5	ug/L	08/29/2006	08/31/2006	
Acenaphthylene	2778	5546	<5	ug/L	08/29/2006	08/31/2006	
Anthracene	2778	5546	<5	ug/L	08/29/2006	08/31/2006	
Benzo(a) anthracene	2778	5546	<5	ug/L	08/29/2006	08/31/2006	
Benzo(b) fluoranthene	2778	5546	<10	ug/L	08/29/2006	08/31/2006	
Benzo(k) fluoranthene	2778	5546	<10	ug/L	08/29/2006	08/31/2006	
Benzo(ghi)perylene	2778	5546	<5	ug/L	08/29/2006	08/31/2006	
Benzo(a) pyrene	2778	5546	<5	ug/L	08/29/2006	08/31/2006	
Benzyl alcohol	2778	5546	<10	ug/L	08/29/2006	08/31/2006	
bis(2-Chloroethoxy)methane	2778	5546	<5	ug/L	08/29/2006	08/31/2006	



Laura Funk WESTON SOLUTIONS 2566 Kohnle Drive Miamisburg, OH 45342-3669 Job Number: 06.15339 Report Date: 09/06/2006

Page: 9 of 13

		Prep	Run				
		Batch	Batch	Blank		Date	Date
	Analyte	Number	Number	Result	Units	prepped	Analyzed
	bis(2-Chloroethyl)ether	2778	5546	<5	ug/L	08/29/2006	08/31/2006
	bis(2-Ethylhexy1)phthalate	2778	5546	108	ug/L	08/29/2006	08/31/2006
	bis(2-chloroisopropyl)ether	2778	5546	<5.0	ug/L	08/29/2006	08/31/2006
	4-Bromophenyl phenyl ether	2778	5546	<5	ug/L	08/29/2006	08/31/2006
	Benzyl butyl phthalate	2778	5546	<5	ug/L	08/29/2006	08/31/2006
	4-Chloroaniline	2778	5546	<10	ug/L	08/29/2006	08/31/2006
	2-Chloronaphthalene	2778	5546	<5	ug/L	08/29/2006	08/31/2006
	Chrysene	2778	5546	<5	ug/L	08/29/2006	08/31/2006
	Dibenz(a,h)anthracene	2778	5546	<5	ug/L	08/29/2006	08/31/2006
	Dibenzofuran	2778	5546	<10	ug/L	08/29/2006	08/31/2006
	1,2-Dichlorobenzene	2778	5546	<5	ug/L	08/29/2006	08/31/2006
	1,3-Dichlorobenzene	2778	5546	<5	ug/L	08/29/2006	08/31/2006
	1,4-Dichlorobenzene	2778	5546	<5	ug/L	08/29/2006	08/31/2006
	Diethyl phthalate	2778	5546	<5	ug/L	08/29/2006	08/31/2006
	Dimethyl phthalate	2778	5546	<5	ug/L	08/29/2006	08/31/2006
	2,4-Dinitrotoluene	2778	5546	<5	ug/L	08/29/2006	08/31/2006
	2,6-Dinitrotoluene	2778	5546	<5	ug/L	08/29/2006	08/31/2006
	Di-n-octylphthalate	2778	5546	<5	ug/L	08/29/2006	08/31/2006
	Fluoranthene	2778	5546	<5	ug/L	08/29/2006	08/31/2006
	Fluorene	2778	5546	<5	ug/L	08/29/2006	08/31/2006
	Hexachlorobenzene	2778	5546	<5	ug/L	08/29/2006	08/31/2006
	Hexachlorocyclopentadiene	2778	5546	<20	ug/L	08/29/2006	08/31/2006
	Hexachloroethane	2778	5546	<5	ug/L	08/29/2006	08/31/2006
	Indeno(1,2,3-cd)pyrene	2778	5546	<5	ug/L	08/29/2006	08/31/2006
	Isophorone	2778	5546	<5	ug/L	08/29/2006	08/31/2006
	Naphthalene	2778	5546	<5	ug/L	08/29/2006	08/31/2006
	Nitrobenzene	2778	5546	<5	ug/L	08/29/2006	08/31/2006
	N-Nitrosodi-n-propylamine	2778	5546	<5	ug/L	08/29/2006	08/31/2006
	Phenanthrene	2778	5546	<5	ug/L	08/29/2006	08/31/2006
	Pyrene	2778	5546	<5	ug/L	08/29/2006	08/31/2006
	1,2,4-Trichlorobenzene	2778	5546	<5	ug/L	08/29/2006	08/31/2006
	Surrogate: d5-Nitrobenzene	2778	5546	85	+	08/29/2006	08/31/2006
	Surrogate: 2-Fluorobiphenyl	2778	5546	85	*	08/29/2006	08/31/2006
	Surrogate: dl4-Terphenyl	2778	5546	87	*	08/29/2006	08/31/2006
	ACID COMPOUNDS (AQ) 8270						
	2-Chlorophenol	2778	5546	<10	ug/L	08/29/2006	08/31/2006
	4-Chloro-3-methylphenol	2778	5546	<10	ug/L		08/31/2006
	2-Methylphenol	2778	5546	<10	ug/L	08/29/2006	08/31/2006
	meta & para-Methylphenol	2778	5546	<10	ug/L	08/29/2006	08/31/2006
١							



Laura Funk WESTON SOLUTIONS 2566 Kohnle Drive Miamisburg, OH 45342-3669

Job Number: 06.15339 Report Date: 09/06/2006 Page: 10 of 13

	Prep	Run				
	Batch	Batch	Blank		Date	Date
Analyte	Number	Number	Result	Units	Prepped	Analyzed
Benzoic acid	2778	5546	<50	ug/L	08/29/2006	08/31/2006
2,4-Dichlorophenol	2778	5546	<10	ug/L	08/29/2006	08/31/2006
2,4-Dimethylphenol	2778	5546	<10	ug/L	08/29/2006	08/31/2006
2-Methyl-4,6-dinitrophenol	2778	5546	<10	ug/L	08/29/2006	08/31/2006
2-Nitrophenol	2778	5546	<10	ug/L	08/29/2006	08/31/2006
Pentachlorophenol	2778	5546	<10	ug/L	08/29/2006	08/31/2006
Phenol	2778	5546	<10	ug/L	08/29/2006	08/31/2006
2,4,5-Trichlorophenol	2778	5546	<10	ug/L	08/29/2006	08/31/2006
2,4,6-Trichlorophenol	2778	5546	<10	ug/L	08/29/2006	08/31/2006
Surrogate: d6-Phenol	2778	5546	84	*	08/29/2006	08/31/2006
Surrogate: 2-Fluorophenol	2778	5546	78	*	08/29/2006	08/31/2006
Surrogate: Tribromophenol	2778	5546	85	*	08/29/2006	08/31/2006
PCB's M 8082. Aqueous						
Aroclor 1016	1972	803	<0.20	ug/L	08/30/2006	09/05/2006
Aroclor 1221	1972	803 '	<0.20	ug/L	08/30/2006	09/05/2006
Aroclor 1232	1972	803	<0.20	ug/L	08/30/2006	09/05/2006
Aroclor 1242	1972	803	<0.20	ug/L	08/30/2006	09/05/2006
Aroclor 1248	1972	803	<0.20	ug/L	08/30/2006	09/05/2006
Aroclor 1254	1972	803	<0.20	ug/L		09/05/2006
Aroclor 1260	1972	803	<0.20	ug/L	08/30/2006	09/05/2006
Surrogate: DCB	1972	803	n/a	8	08/30/2006	09/05/2006
Surrogate: TCX	1972	803	85	*	08/30/2006	09/05/2006



Quality Control Report Laboratory Control Standard

Laura Funk WESTON SOLUTIONS 2566 Kohnle Drive Miamisburg, OH 45342-3669

Job Number: 06.15339 Report Date: 09/06/2006 Page: 11 of 13

	Prep	Run		LCS	LCS	LCS
	Batch	Batch	Date	True	Conc	*
Analyte	No.	No.	Analyzed	Conc	Found	Rec.
VOLATILE COMPOUNDS - 8260 (AQ)						
Xylenes, Total		9278	09/03/2006	60	56.6	94
OLATILE COMPOUNDS - 8260 (AQ)						
enzene		9279	09/05/2006	20	20.6	103
Chlorobenzene		9279	09/05/2006	20	19.1	96
1,1-Dichloroethene		9279	09/05/2006	20	19.7	98
Athylbenzene		9279	09/05/2006	20	19.5	98
oluene		9279	09/05/2006	20	20.4	102
Trichloroethene		9279	09/05/2006	20	20.1	100
: 1,2-Dichloroethane-d4		9279	09/05/2006	100	97	97
: Dibromofluoromethane		9279	09/05/2006	100	101	101
Surr: Toluene-d8		9279	09/05/2006	100	104	104
Surr: 4-Bromofluorobenzene		9279	09/05/2006	100	97	97
ASE NEUTRAL COMP. (AQ) 8270						
cenaphthene	2778	5546	08/31/2006	50	45.7	91
1,4-Dichlorobenzene	2778	5546	08/31/2006	50	31.4	63
2,4-Dinitrotoluene	2778	5546	08/31/2006	50	51.5	103
-Nitrosodi-n-propylamine	2778	5546	08/31/2006	50	48.2	96
yrene	2778	5546	08/31/2006	50	47.6	95
1,2,4-Trichlorobenzene	2778	5546	08/31/2006	50	34.9	70
Surrogate: d5-Nitrobenzene	2778	5546	08/31/2006	100	88.1	88
urrogate: 2-Fluorobiphenyl	2778	5546	08/31/2006	100	84.5	84
grrogate: d14-Terphenyl	2778	5546	08/31/2006	100	89.7	90
ACID COMPOUNDS (AQ) 8270						
2-Chlorophenol	2778	5546	08/31/2006	50	41.6	83
-Chloro-3-methylphenol	2778	5546	08/31/2006	50	48.5	97
-entachlorophenol	2778	5546	08/31/2006	50	48.3	97
Phenol	2778	5546	08/31/2006	50	41.6	83
mirrogate: d6-Phenol	2778	5546	08/31/2006	200	162.0	81
irrogate: 2-Fluorophenol	2778	5546	08/31/2006	200	154.0	77
Surrogate: Tribromophenol	2778	5546	08/31/2006	200	171.0	86
PCB's M 8082. Aqueous						
Coclor 1016	1972	803	09/05/2006	1.0	1.03	103
coclor 1260	1972	803	09/05/2006	1.0	1.20	120
Surrogate: DCB	1972	803	09/05/2006	100	n/a	
Surrogate: TCX	1972	803	09/05/2006	100	84	84



Quality Control Report Matrix Spike/Matrix Spike Duplicate

Laura Funk WESTON SOLUTIONS 2566 Kohnle Drive Miamisburg, OH 45342-3669

Job Number: 06.15339 Report Date: 09/06/2006 Page: 12 of 13

Matrix Spike/Matrix Spike Duplicate Samples may not be samples from this job.

Prep MS MSD Run ' Sample Batch * Batch * Number Number Number Rec.

Analyte Rec. RPD Flags

VOLATILE COMPOUNDS - 8260 (AQ) 217321



RE PAGE OF PAGE

Notes & Comments

Laura Funk WESTON SOLUTIONS 2566 Kohnle Drive Miamisburg, OH 45342-3669

Job Number: 06.15339 Report Date: 09/06/2006 Page: 13 of 13

Sample: 218254

Analysis: DRO Fingerprint Scan

Although the sample was not an exact match to anything in our library, it had peaks from C10-C16 which is the Kerosene range and also a bump from 18-C38 in the Motor Oil range. It also had a high component of lighter between the bounds before C9.

Test/America

Dayton Division 3601 S. Dixie Drive Dayton, OH 45439 Phone: 937-294-6856 Toll Free: 800-572-9839 Fax: 937-294-7816 To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?

Compliance Monitoring

Client Name:	ME	STON	-	OC	UTIO	NS.	14)	C	Clier	nt #:								-			1			
Address:	95 Cal	MISBURGION UN 45342										Project Name: TECH TOWN												
City/State/Zip Code:	MIR												Pro	ject #:			. /				7.1			
Project Manager: _	LAU	MA FUNK								Site/I	Locati	on ID:	DA	AYTON FUNK				State: OH						
Telephone Number:	937-384. 1200 Fax: 937. 384. 4201									Rep	ort To:	1.	fu	WK										
Sampler Name: (Print Name)	and !	FUN I	TH	1	_										Invoi	ice To:								-
Sampler Signature: 17 Auck							Quote #					PO#												
	0				Matrix	Pres	erval	ion 8	# of (Conta	iners					Analy	ze For:			,	1		OC Dallar	wahloo
TAT Standard Rush (surcharges may apply) Date Needed: Fax Results: Y N SAMPLE ID	Date Sampled	Time Sampled	G=Grab, C=Composite	Field Filtered	SL-Sludge DW-Drinking Water GW-Groundwater S-Soil/Soild WW-Wastewater Specify Other	HNO3	HCI	NaOH	H ₂ SO.	None	Other (Specify)	The state of the s	THE FIRE	2000	3000	3/							QC Delive None Level (Batch of Level 3) Level 4 Other:	2 QC)
UN- 23906-01	1/29/00	1543	1		WIN					1		X								1				
WC-82906-03 WC-82906-04		1550	XXX		MM		3			1			X	×	X									
LAST ITEM	-	-	-		Philippedist.						-	- Charles		TO SHATISTICS OF		pr EXPOURNMENT		11:1	N. Mary Street, market		CPHERIODER	-	·	1
																	11-						-	
					14 14																_	_		
						Ц			1		L													1
							1	1							1								No. of this	
					10											100		-						
Special Instructions:			,															1000	Init La	ab Tem	MMENT p: np://	300 505	ico	
Relinquished By: T. San TH		Bate:	6	fime	Received By				Sate:	8-29.06 76.20 Time:				Rec Lab Temp: 5.00 unice chirect from field Custody Seals: Y N N/A Bottles Supplied by Test America: Y N										
Relinquished By:		Date:		Time	Received By:				Date: Time: Bottles Supplied by Test America: Y						e Y N									
Relinquished By:		Date:		Time	me: Received By:				Date:		Time:		Method of Shipment:											



September 15, 2005

Ms. Patricia J. Polston Waste, Pesticides and Toxics Division U.S. EPA Region 5 77 W. Jackson Blvd., DRE-9J Chicago, IL 60604-3590

Re:

Interim Measures

G-Lot Transformer Pad Removal

Performance-Based RCRA Corrective Action Former Delphi Harrison Thermal Systems

USEPA ID No. OHD 017 958 604

Dear Ms. Polston:

Please find the attached three (3) copies of the memorandum which describes the interim measures (IM) performed during the G-Lot Transformer Pad Removal located at the Former Delphi Harrison Thermal Systems Site located at 300 Taylor Street, Dayton, Ohio. The G-Lot Transformer Pad Removal was completed by Zeigler Environmental Services, Inc. with oversight provided by Conestoga-Rovers & Associates on behalf of the General Motors Corporation (GM) and in accordance with the Performance-Based Corrective Action Agreement for the site. Please call (937) 455-2636 if you have any questions concerning this information.

Sincerely,

Pamela L. Barnett, P.G.

Project Manager

BOW Environmental Solutions, Inc. on behalf of GM

attachment.

c.c.: Jean Caufield, GM Remediation

Pamela Hull, OEPA Carl Bridges, Peerless

Gwen Eberly/Chris Lipson, City of Dayton



651 Colby Drive, Waterloo, Ontario, Canada N2V 1C2 Telephone: (519) 884-0510 Fax: (519) 884-0525

www.CRAworld.com

MEMORANDUM

To:

Pam Barnett

REF. NO.:

012638-04/jdh/37

FROM:

Sylvie Eastman

DATE:

September 13, 2005

RE:

Interim Measures performed for G-Lot Transformer Pad Removal

Former Delphi Harrison Thermal Systems Facility (Site), Dayton, Ohio

This memorandum has been prepared to present the interim measures that were performed on the G-Lot of the Former Delphi Harrison Thermal Systems' Facility (Site). This memorandum outlines the background of the site, the interim measures conducted, and the results of the concrete samples.

1.0 BACKGROUND

In March 1978 a PCB transformer was installed in Electrical Vault 51 at the south end of Building G-4, and was equipped with a containment pad with a blind sump. In October 1978 approximately 30 to 45 gallons of fluid leaked from a broken ceramic bushing on this transformer. The release was contained and was cleaned by triple rinsing with trichlorobenzene. Approximately two drums of material were disposed of off Site. The PCB transformer was immediately taken out of service and replaced with a non-PCB transformer.

As part of the RFI Work Plan two wipe and two concrete samples were collected in April 2002 and were analyzed for TCL PCBs. Results indicated levels of PCBs greater than 50 ppm in one of the concrete samples. To determine the extent of the PCB contamination, two surface soil samples were collected adjacent to the transformer pad. Soil sample results were non-detect for PCBs. Figure 1 presents the results of the concrete and soil samples taken in this area.

2.0 INTERIM MEASURES CONDUCTED

The concrete was broken up as necessary to facilitate handling and disposal (approximately 2-3 feet in diameter) and loaded onto roll off boxes, which were placed in the vicinity of the transformer pad. Prior to leaving the site, the haul trucks and roll-off boxes were securely tarped. Manifests were prepared and accompanied the loads. Oversight for the concrete removal was preformed by CRA, the concrete removal was contracted out to Zeigler Environmental Services, Inc., and Haley & Aldrich coordinated with Waste Management for the transportation and disposal of the material to an appropriate disposal facility.

After the transformer pad was removed, a second concrete pad was observed at ground surface elevation. Two concrete samples were collected from this pad in February 2005 and analyzed for TCL PCBs. Results indicated low levels of PCBs. Therefore, further removal of concrete and/or soil was not warranted. Figure 1 presents the results of the concrete samples.



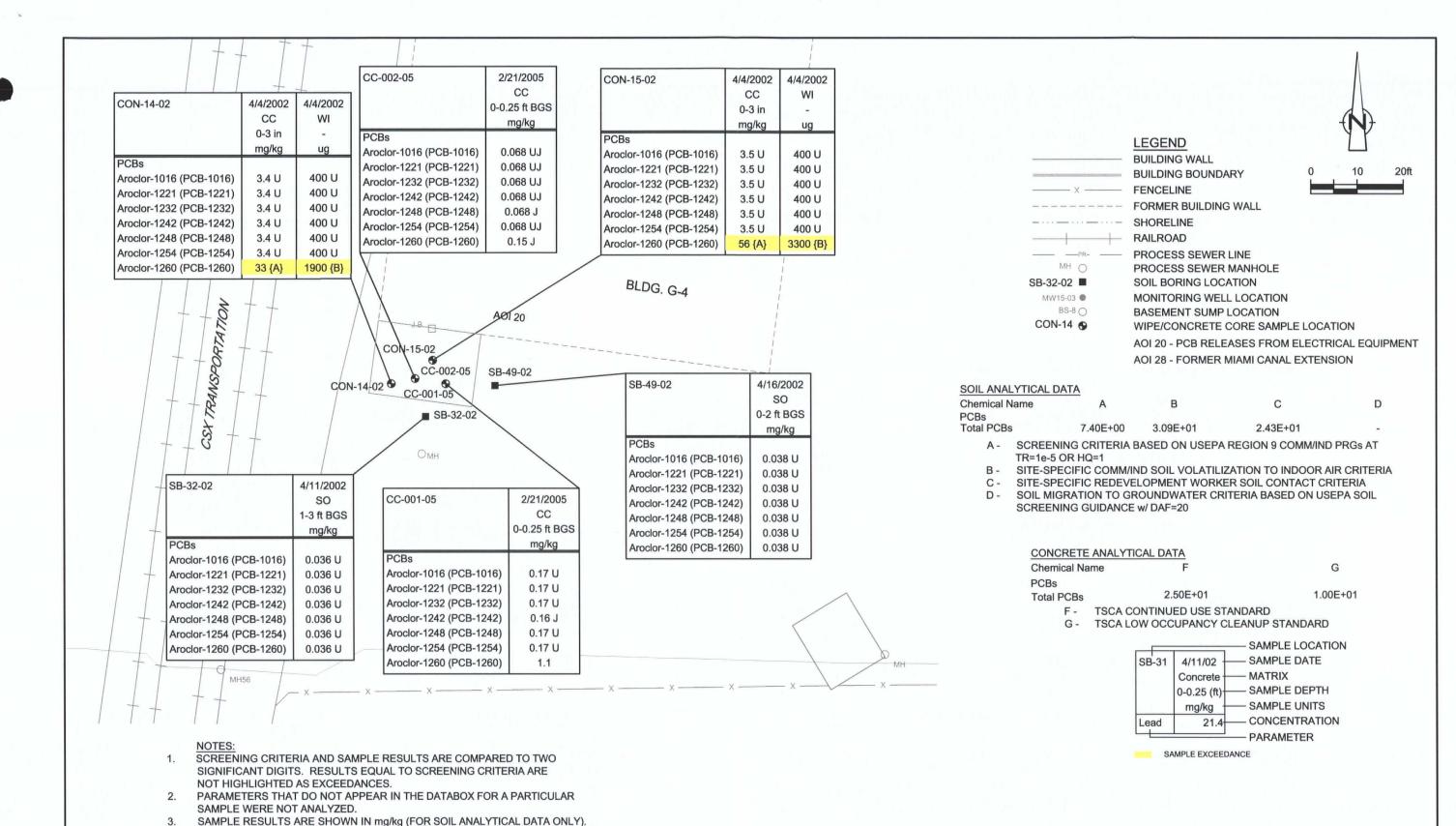


figure 1

CONCRETE AND SOIL ANALYTICAL DATA FOR ELECTRICAL VAULT #51
FORMER DELPHI HARRISON THERMAL SYSTEMS FACILITY

Dayton, Ohio

